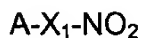




PENDING CLAIMS

Claims 1, 2, 5, 7 and 8

Claim 1. A method for treatment of urinary incontinence by administering compounds, having the formula:



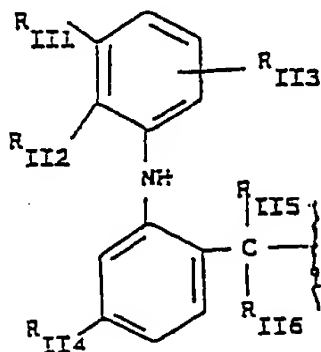
or their salts, where:

A = R(COX)_t wherein t is an integer 0 or 1;

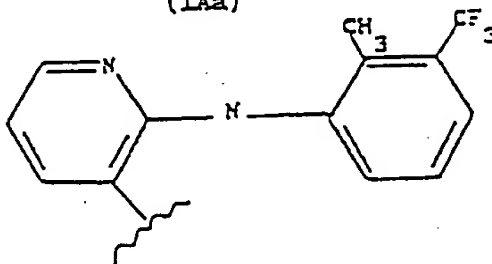
X = O, NH, NR_{1C} wherein R_{1C} is a linear or branched alkyl having from 1 to 10 C atoms;

R is chosen from the following groups:

Group I A), where t = 1,



(IAa)



(IAb)

where:

TECH CENTER 1600/2900

JAN 22 2003

RECEIVED

R₁₁₅ is H, a linear C₁-C₃ alkyl, or a branched C₁-C₃ alkyl;

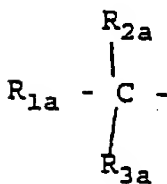
R₁₁₆ has the same structure as R₁₁₅,

R₁₁₁, R₁₁₂ and R₁₁₃ are each hydrogen, linear C₁-C₆ alkyl, branched C₁-C₆ alkyl, C₁-C₆ alkoxy, Cl, F, or Br;

R₁₁₄ has the same structure as R₁₁₁ or is bromine;

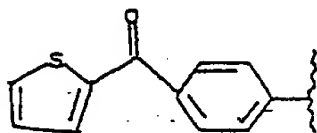
Group II A) chosen from the following:

where, when t = 1, R is

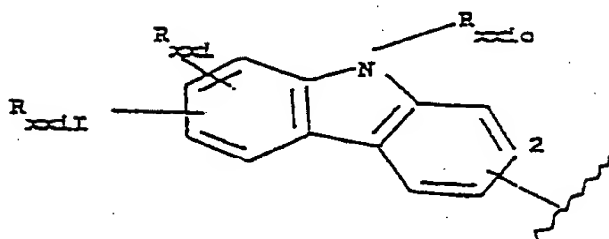


where R_{2a} and R_{3a} are H, a linear C₁-C₁₂ alkyl, a branched C₁-C₁₂ alkyl, or allyl, with the proviso that when one of the two is allyl the other is H;

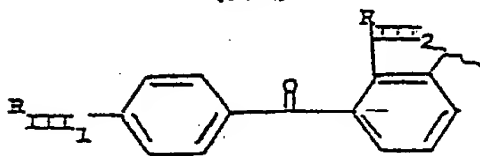
R_{1a} is chosen from the subgroup II Aa) consisting of



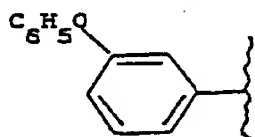
(III)



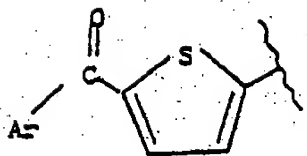
(XXI)



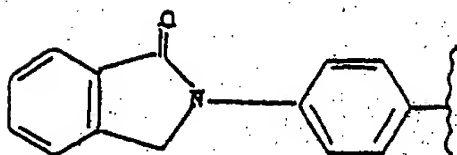
(IV)



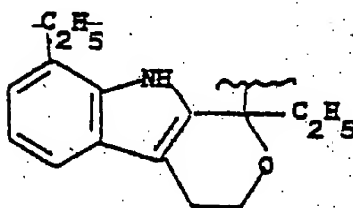
(VII)



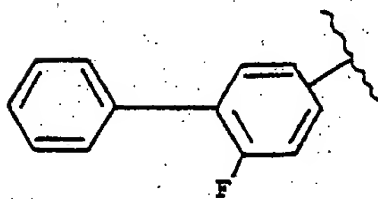
(XXXV)



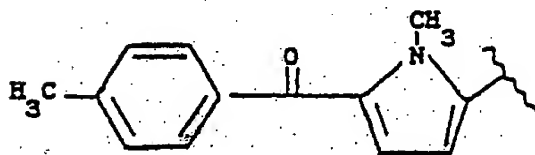
(VI)



(VIII)

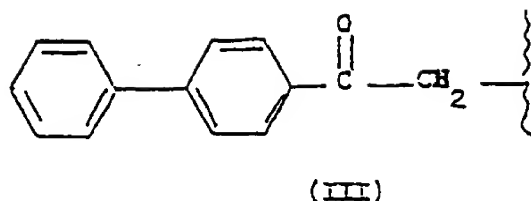


(IX)



(X)

, and



wherein:

in the residue of formula (IV):

R_{III1} is H or SR_{III3} where R_{III3} contains from 1 to 4 linear or branched C atoms; and

R_{III2} is H or hydroxy;

in the residue of formula (XXI):

R_{xxi0} is H, a linear alkyl having 1-6 carbon atoms, a branched alkyl having from 1 to 6 carbon atoms, a C_1 - C_6 alkoxy-carbonyl bound to a C_1 - C_6 carboxyalkyl, or a C_1 - C_6 alkanoyl, optionally substituted with halogen, benzyl or halobenzyl, benzoyl or halobenzoyl;

R_{xxi1} is H, halogen, hydroxy, CN, a C_1 - C_6 alkyl optionally containing OH groups, a C_1 - C_6 alkoxy, acetyl, benzyloxy, SR_{xxi2} where R_{xxi2} is a C_1 - C_6 alkyl; a perfluoroalkyl having a 1-3 C atoms, a C_1 - C_6 carboxyalkyl optionally containing OH groups, NO_2 , sulphamoyl, dialkyl sulphamoyl with the alkyl having from 1 to 6 C atoms, or difluoroalkylsulphonyl with the alkyl having from 1 to 3 C atoms;

R_{xxi1} is halogen, CN, a C_1 - C_6 alkyl optionally containing one or more OH groups, a C_1 - C_6 alkoxy, acetyl, acetamido, or benzyloxy,

SR_{III3} is as above defined, a perfluoroalkyl having from 1 to 3 C atoms, hydroxy, a carboxyalkyl having from 1 to 6 C atoms, hydroxy, a carboxyalkyl having from 1 to 6 C atoms, NO_2 , amino, mono- or dialkylamino having from 1 to 6 C atoms, sulphamoyl, a

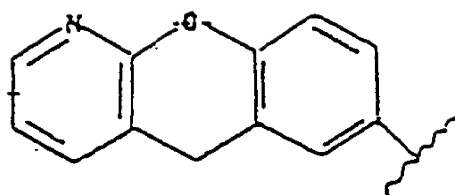
dialkyl sulphamoyl having from 1 to 6 C atoms, difluoroalkylsulphamoyl; or R_{xxi} together with R_{xxil} is an alkylene dioxy having from 1 to 6 C atoms;

In the residue of formula (XXXV):

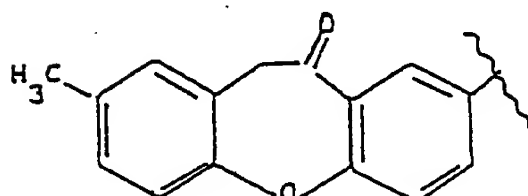
Ar is phenyl, hydroxyphenyl optionally mono- or polysubstituted with halogen, an alkanoyl or alkoxy having from 1 to 6 C atoms, a trialkyl having from 1-6 C atoms, cyclopentyl o-hexyl o-heptyl, thienyl, furyl, furyl containing OH, or pyridyl;

Subgroup II Ab) consisting of:

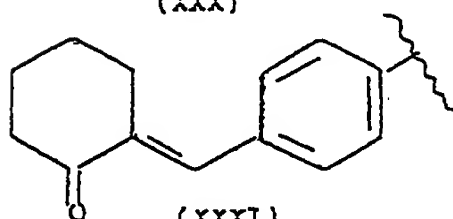
II Ab) :



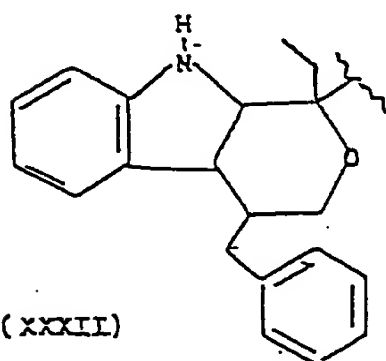
IIIa)



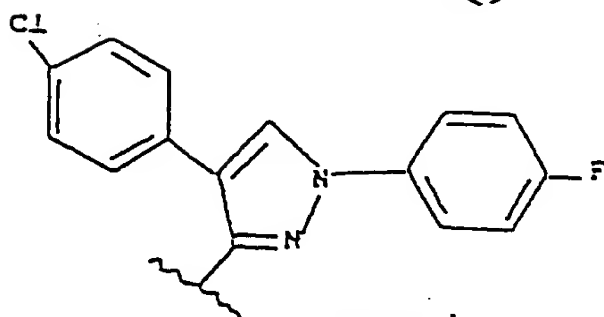
(XXX)



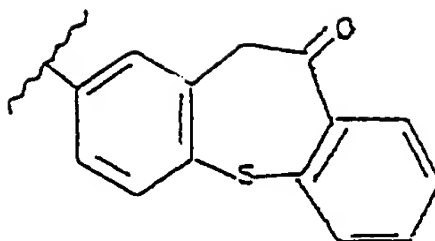
(XXXI)



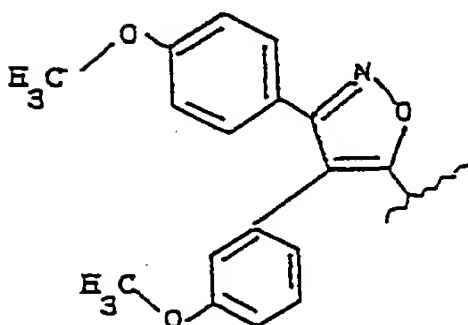
(XXXII)



(XXXIII)



(XXXVI)



(XXXVII)

wherein:

when IIIa) contains $-\text{CH}(\text{CH}_3)-\text{COOH}$ it is known as pranoprofen: α -methyl-5H-(1) benzopyran (2,3-b) pyridine-7-acetic acid;

when residue (XXX) contains $-\text{CH}(\text{CH}_3)-\text{COOH}$ it is known as bermoprofen: dibenz (b,f) oxepin-2-acetic acid;

residue (XXXI) is known as CS-670: 2-(4-2(2-oxo-1-cyclohexylidenemethyl) phenyl) propionic acid, when the radical is $-\text{CH}(\text{CH}_3)-\text{COOH}$;

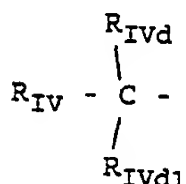
when residue (XXXII) contains group $-\text{CH}_2\text{COOH}$ it is known as pemedolac;

when residue (XXXIII) is saturated with $-\text{CH}_2\text{COOH}$ it is known as pyrazolac: 4-(4-chlorophenyl)-1-(4-fluorophenyl) 3-pyrazolyl acid derivatives;

when residue (XXXVI) is saturated with $-\text{CH}(\text{CH}_3)-\text{COO}-$ it is known as zaltoprofen;

when residue (XXXVII) is CH_2-COOH it derives from the known mofezolac: 3,4-di p-methoxyphenyl) isoxazol-5-acetic acid;

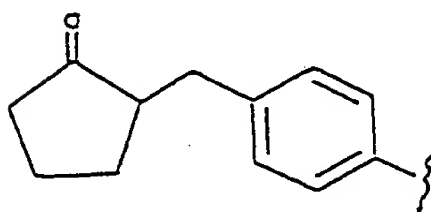
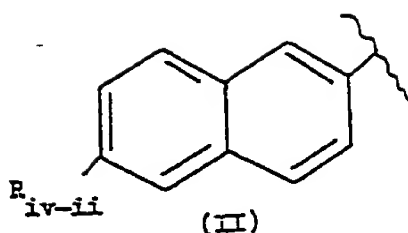
Group IIIA), where $t = 1$,



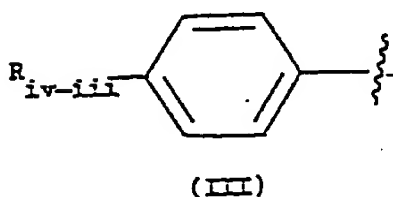
wherein:

at least one of R_{IVd} and R_{IVd1} is H and the other a linear or branched C_1-C_6 alkyl, or difluoroalkyl with the alkyl having from 1-6 C atoms, or R_{IVd} and R_{IVd1} jointly form a methylene group;

R_{IV} has the following structure:



, or

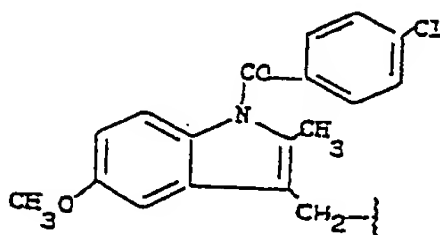


where:

in the residue of formula (II):

R_{IV-II} is selected from the group consisting of an alkyl having from 1 to 6 C atoms, a cycloalkyl having from 3 to 7 C atoms, an alkoxymethyl having from 1 to 7 C atoms, a trifluoroalkyl having from 1 to 3 C atoms, vinyl, ethynyl, halogen, an alkoxy having from 1 to 6 C atoms, a difluoroalkoxy with the alkyl having from 1 to 7 C atoms, an alkoxymethyloxy having from 1 to 7 C atoms, an alkylthiomethyloxy with the alkyl having from 1 to 7 C atoms, an alkylmethylthio with the alkyl having from 1 to 7 C atoms, cyano, difluoromethylthio, a substituted phenyl-, and phenylalkyl with the alkyl having from 1 to 8 C atoms;

R_{IV-III} is a C_2 - C_5 alkyl, a C_2 or C_3 alkyloxy, allyloxy, phenoxy, phenylthio, a cycloalkyl having from 5 to 7 C atoms, optionally substituted at position 1 by a C_1 - C_2 alkyl;
Group IV A)

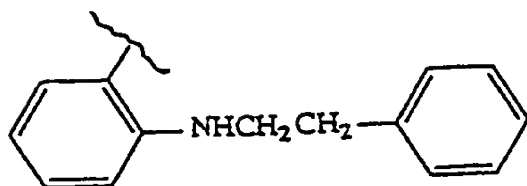


(IV)

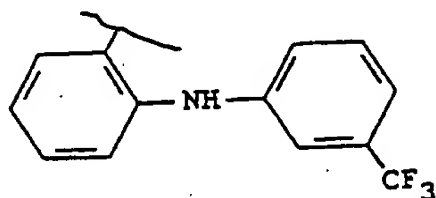
where $A = RCOO$, $t = 1$,

Group V A) chosen from the following:

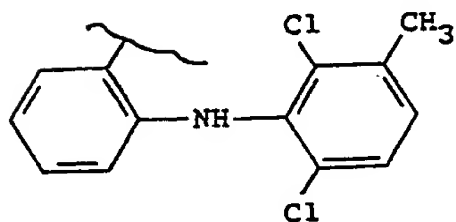
Subgroup V Aa) residues chosen from the following, where $t = 1$



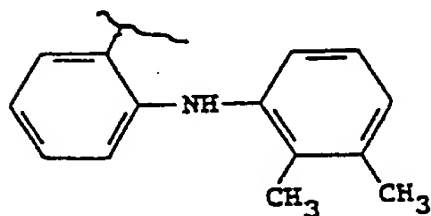
(V Aa1)



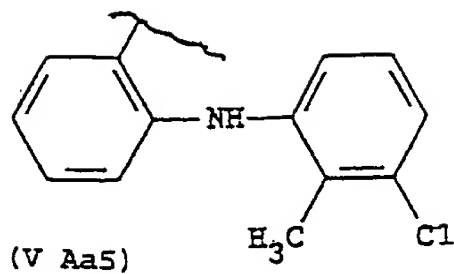
(V Aa2)



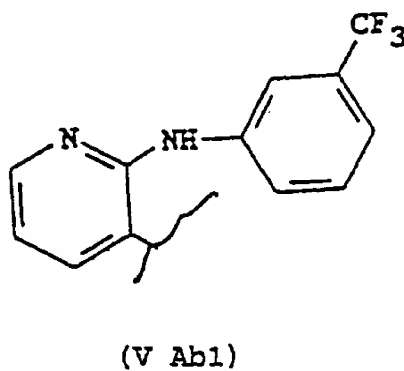
(V Aa3)



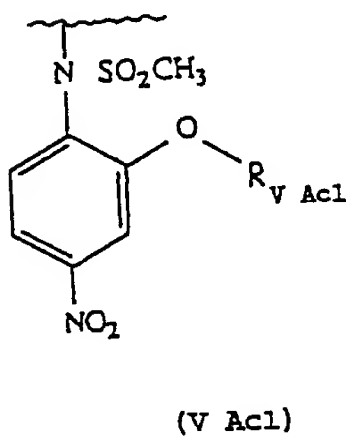
(V Aa4)

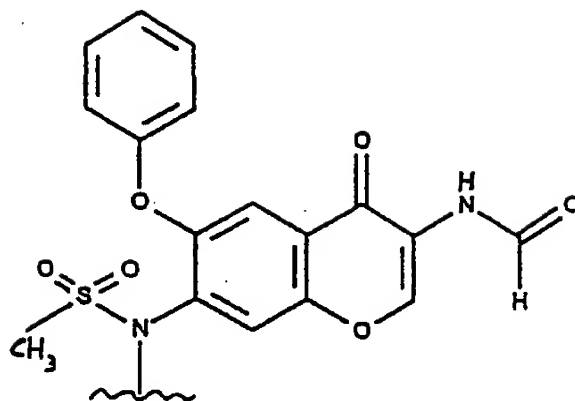


subgroup V Ab), residue, where $t = 1$:

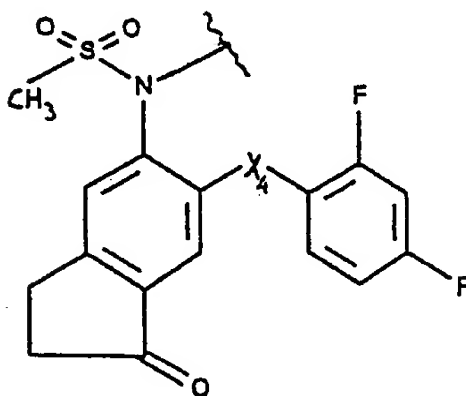


subgroup V Ac), residue, where $t = 0$ and R is as follows:

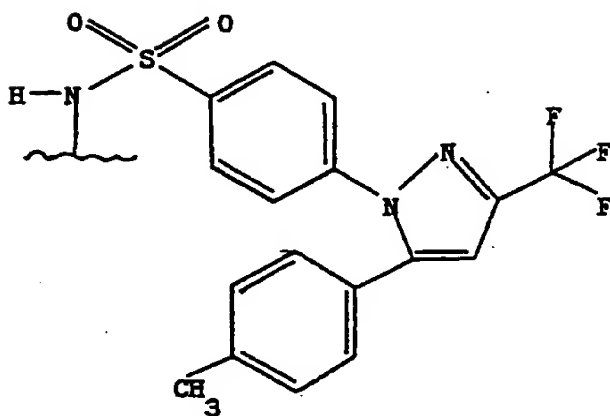




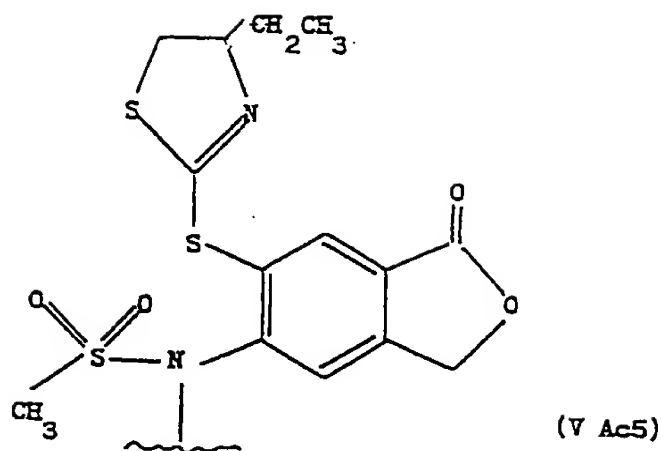
(V Ac2)



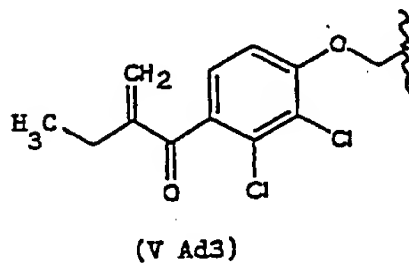
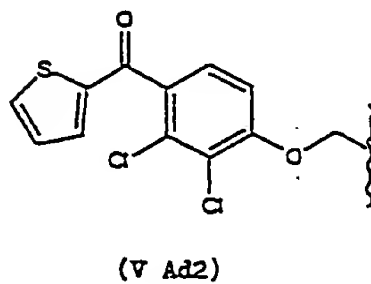
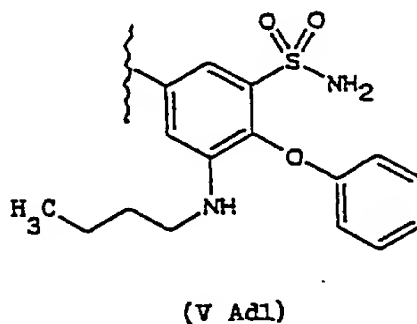
(V Ac3)

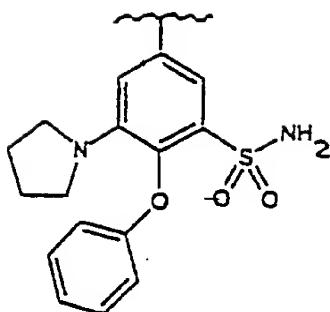


(V Ac4)



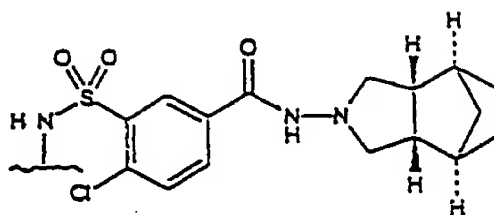
subgroup V Ad) residues, where $t = 1$ and R is as follows:



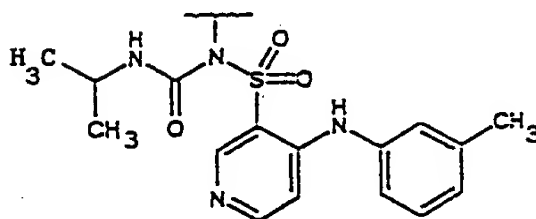


(V Ad4)

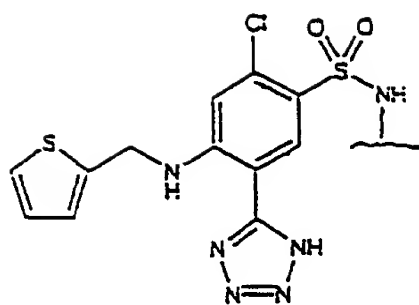
subgroup Ae) residues, where $t = 1$ and R is as follows:



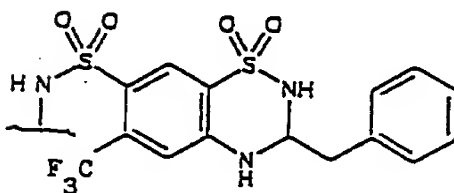
(V Ae1)



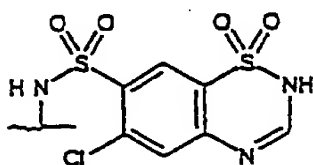
(V Ae2)



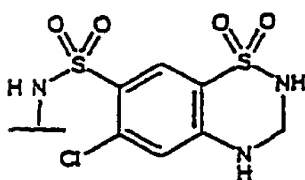
(V Ae3)



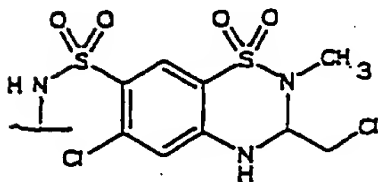
(V Ae4)



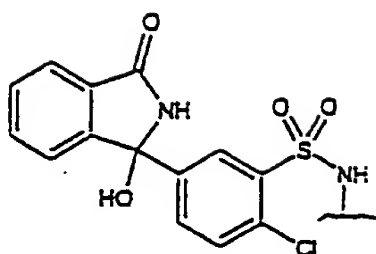
(V Ae5)



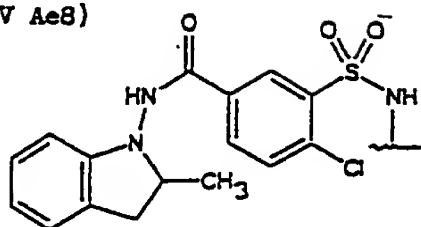
(V Ae6)



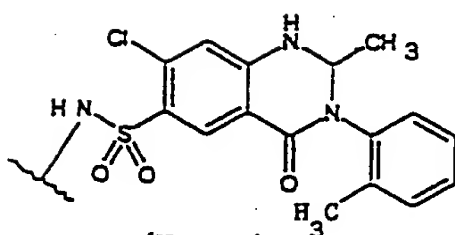
(V Ae7)



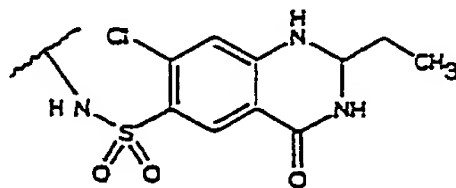
(V Ae8)



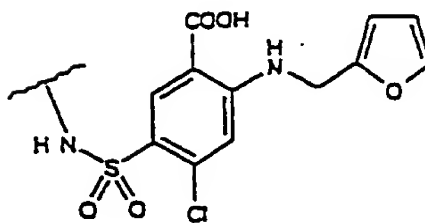
(V Ae9)



(V Ae10)



(V Ae11)



(V Ae12)

wherein:

in compounds (V Ac1) Rvac1 attached to the oxygen atom in position 2 of the benzene ring of the N - (4-nitro-phenyl)methansulphonamide can be phenyl or cyclohexane, when Rvac1 is phenyl the residue is that of nimesulfide;

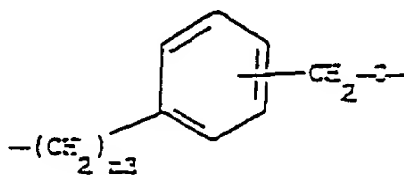
in compounds (V Ac2) the residue of 3-formylamino-7-methylsulfonylamino-6-phenoxy-4H-1-benzopyran-4-one has been shown;

in compounds (V Ac3) the atom X_4 that links the radical 2,4-difluorothiophenyl to position 6 of the indanone ring of the residue 5-methanesulfonamido-1-indanone can be sulfur or oxygen;

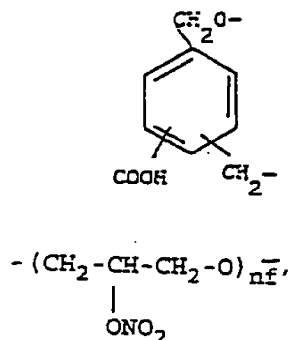
X_1 in formula A- X_1 -NO₂ is a bivalent connecting bridge chosen from the following:

- YO

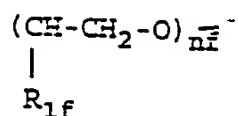
where Y is a linear or branched C₁-C₂₀ alkylene, or an optionally substituted cycloalkylene having from 5 to 7 carbon atoms;



where n_3 is an integer from 0 to 3;



where n_f is an integer from 1 to 6;

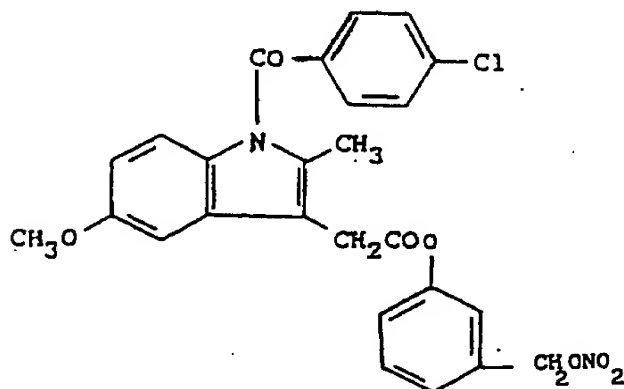


where $\text{R}_{1f} = \text{H}$ or CH_3 and n_f is an integer from 1 to 6.

Claim 2. The method according to Claim 1, in which R is chosen from groups IV A) and V A).

Claim 5. A method for the treatment of musculoskeletal disease of an inflammatory nature, gynaecological and obstetrical disease including early delivery, pre-eclampsia and dysmenorrhoea, cardiovascular disease including re-stenosis, gastrointestinal tumors by administering compounds from group V A) according to Claim 3.

Claim 7. A compound having the following formula:



Claim 8. A method for treating urinary incontinence comprising administering to a patient in need thereof a therapeutically effective amount of the compound of claim 7 or a pharmaceutically acceptable salt thereof.